

Although the student attempted to solve each problem, computational skills, basic thinking skills, structure, and process development are severely lacking.

4th GRADE MAIN RANGEFINDER

1

Your teacher will read the entire test to you before you begin.
Do not use a calculator on this assessment.

1. The fourth grade class opened a store at school. They had 25 notebooks, 62 erasers, 104 rulers, 19 pens, and 1,204 pencils.

- a. How many total items did the fourth grade class have that they could sell? Show or explain how you found your answer.

$$\begin{array}{r} 1,204 \text{ items} \\ + 19 \\ \hline 1,223 \end{array}$$

- b. The students need three times as many erasers as the store has on the shelf. How many erasers do the students need? Show or explain how you found your answer.

$$\begin{array}{r} 62 \\ \times 3 \\ \hline 186 \end{array}$$

- c. A teacher bought 25 rulers from the school store. How many rulers were left? Show or explain how you found your answer.

$$\begin{array}{r} 104 \\ - 25 \\ \hline 79 \end{array}$$

rulers

- d. Five students came to buy the 25 notebooks. Each of the five students got the same number of notebooks. How many notebooks did each student buy? Show or explain how you found your answer.

$$\begin{array}{r} 25 \\ \times 5 \\ \hline 125 \end{array}$$

notebooks

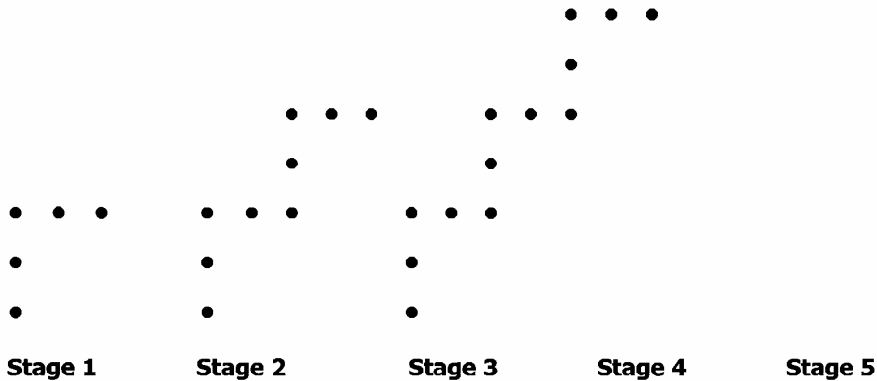
Minimal evidence of understanding of situation

Read problems 2, 3, 4, and 5 on this and the next two pages.
Select three problems to answer. Answer ALL of the parts of the three problems you select to answer.

Cross out the one problem that you do not choose to answer.

2. Look carefully at the stair-step pattern.

a. Draw Stage 4 and Stage 5 of the pattern.



b. Complete the chart below showing the total number of dots in each stage.

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Number of Dots	5	9	13	19	13

c. If this pattern continues, how many dots will be in Stage 10? Show or explain how you found your answer.

$$\begin{array}{r}
 27 \\
 + 59 \\
 \hline
 86
 \end{array}$$

Lack of communication skills;
Minimal use of basic thinking skills

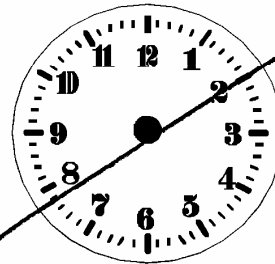
d. Explain the rule for the number pattern you see.

5 9 13 9 13

Inappropriate processes

3.

Cinema 6 Movie Theater		
1 st	movie begins at	12:15 PM
2 nd	movie begins at	12:30 PM
3 rd	movie begins at	12:45 PM
4 th	movie begins at	1:00 PM
5 th	movie begins at	1:15 PM
6 th	movie begins at	1:30 PM



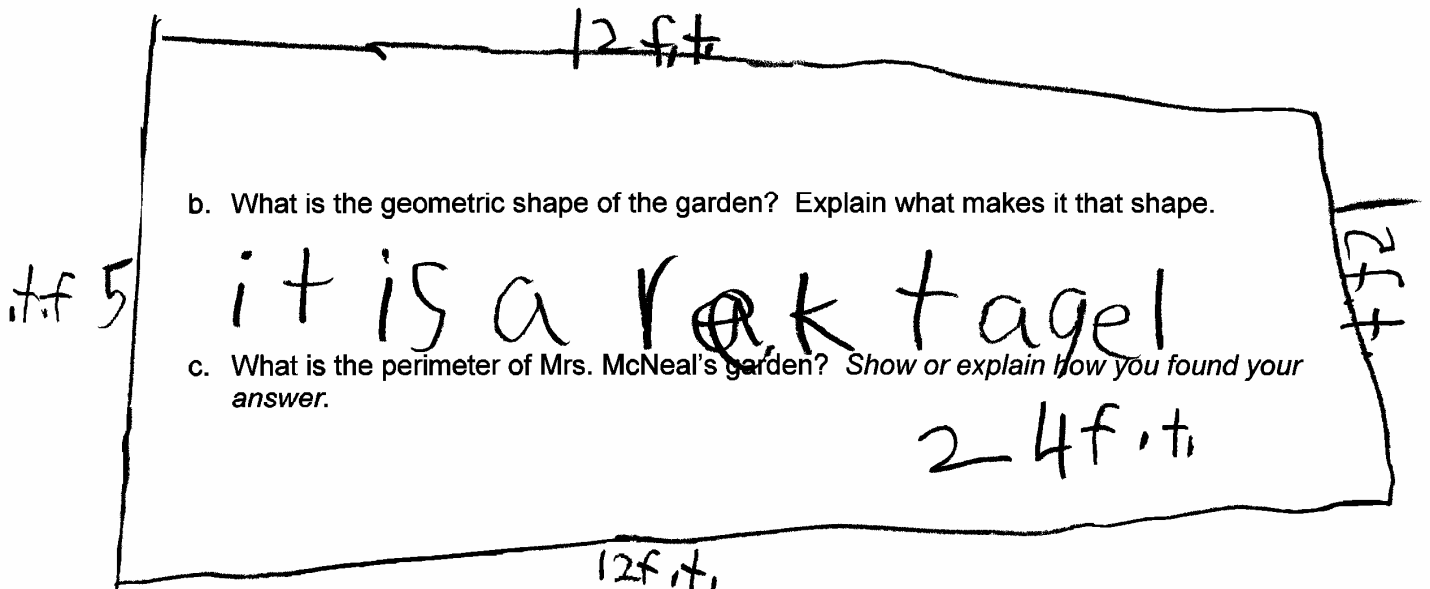
- a. How much time is between the start of the first movie and the start of the sixth movie? *Show or explain how you found your answer.*
- b. If the third movie lasts 2 hours and 15 minutes, what time will it be when the movie finishes? *Show or explain how you found your answer.*
- c. A family wants to go to the fifth movie. They live 40 minutes from the theater. What time will they need to leave home to get to the theater on time? *Show or explain how you found your answer.*

Below grade level
performance

4. Mrs. McNeal is going to plant her garden. She wants to make it 12 feet long and 5 feet wide.
- a. **Draw** a picture or a diagram of her garden. **Label** the measurement of each side.

- b. What is the geometric shape of the garden? Explain what makes it that shape.

- c. What is the perimeter of Mrs. McNeal's garden? *Show or explain how you found your answer.*



5. Andre asked his teammates to choose their favorite kind of cookie. Their choices are listed below:

Teammate	Favorite Cookie	Teammate	Favorite Cookie
Pete	chocolate chip	Ryan	chocolate chip
Cory	peanut butter	Danny	oatmeal
Bob	oatmeal	Chris	ginger
Jack	chocolate chip	Tom	sugar
Josh	peanut butter	Bill	peanut butter
Steve	ginger	Tony	chocolate chip
Mike	chocolate chip	Kayd	chocolate chip
Matt	chocolate chip	Payton	peanut butter
Shawn	sugar	Sam	ginger

- a. How many teammates chose each kind of cookie? *Show or explain how you found your answer.*

chocolate chip 5 ginger 3
 peanut butter 4
 oatmeal 2 sugar 2

Minimal problem-solving strategies

- b. Make a graph to show how many teammates chose each kind of cookie. **Label** the graph.

Pete				
Mike				
Matt				
Ryan				
tony				
Kayd				

- c. Write **two** things you learned about the cookie choices by looking at the graph.

Significant lack of structure